DOCUMENT RESUME

ED 179 451 SO 012 151

AUTHOR Collier, Malcolm; Dethlefsen, Edwin S.
TITLE Anthropology in the Pre-Collegiate Curriculum.
SPONS AGENCY American Anthropological Association, Washington, D.C.; National Science Foundation, Washington, D.C.nd
PUB DATE 68
NOTE 7p.
JOURNAL CIT Anthropology and Education: v27 n1 p11-16 Spr 1968

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Anthropology; *Cultural Awareness; *Curriculum Development; *Racial Differences; Relevance (Education); Secondary Education; Social Studies
IDENTIFIERS Anthropology Curriculum Study Project

ABSTRACT

The paper suggests steps for developing an anthropology curriculum at the secondary level and offers an excerpt from an experimental teacher's guide. The development involves four steps: selection of the most significant topics from the rich mass of anthropological information, identification of the relevance of each topic to the high school student's experience, isolation of the essential aspects of each topic, and the development of methods for helping students understand the data and concepts used in anthropology. The experimental unit, "Study of Early Man," examines race formation and classification. During the four-day unit students construct a chart of the physical traits of the major races, measure the frequency and range of height or skin shade of their classmates and draw conclusions about variance within a race, and study mating practices by examining matrimonial advertisements in the Bombay Times. The unit should make the student aware of the confusion of criteria in the conventional classification of peoples into racial groups. (KC)

ANTHROPOLOGY AND EDUCATION

Anthropology in the Pre-Collegiate Curriculum

MALCOLM COLLIER *and* EDWIN S. DETHLEFSEN

Malcolm Collier is Director of the Anthropology Curriculum Study Project, Chicago, Ill.; Edwin Dethlefsen is a writer and consultant for that Project, and Unit Director for The Study of Early Man. ACSP is supported by the National Science Foundation, and sponsored by the American Anthropological Association.

COLLEGE AND university people often think of secondary curricula as watered-down college courses. Some express a related concern that studying a subject in high school somehow takes the edge off the "real thing," which the student should first encounter in college. According to this view, economics taught in high school would satiate rather than whet a student's interest in that discipline. There are certainly shortcomings in secondary school studies, but these are not among them. The real threat is that traditional secondary school social studies courses may blunt forever the student's interest in social data through sheer boredom produced by inept and inadequate exposure to the social sciences rather than too little or too much.

It is our observation that high school students consistently rate social studies low on their scale of interests. Among the factors responsible for low interest are the remoteness and unreality of the social data presented, the passiveness and noninvolvement of the students with the data, and the methods used in covering the data. Conventional social studies courses present masses of facts with few glimpses of the theoretical principles needed to understand them. We believe the social sciences can and should provide secondary social studies curricula with the needed conceptual framework.

Whether or not the social sciences can indeed bring enduring light and interest to the high school curriculum remains to be seen, but present attempts in this direction show promise. Curriculum improvement projects in geography, sociology, economics, political science, and anthropology have been under way for several years. In varying degrees these efforts are made on the assumption that there are disciplined ways of looking at social data and that high school students are capable of comprehending and using them profitably in studies of human history and human behavior. Certainly the Anthropology Curriculum Study Project has assumed that Anthropology can contribute to high school studies both in content and in pedagogy. It has further assumed that:

> If high school education marks, for the moment, the minimal education we expect of all citizens, then it must be said that the capacity to think systematically about man's nature, his many societies, the whole career of his species, has not been included in our definition of the educated citizen. Knowledge of man produced by the disciplined researches of social scientists has not been generally available to

public school students. The high school graduate who has been taught to expect regularities in the affairs of the physical universe will never have heard of the search for regularities in the affairs of men. But the schools seem to be on the threshold of offering access to such understandings, ready in effect to *democratize a social scientific comprehension of man.* It will be in the context of such a development that Anthropology may find a role in the schools.[1]

The development of this contribution involves four steps: (1) Selection of some of the most significant topics from the rich mass of anthropological information and understanding; (2) Identification of the specific relevance of each topic to the high school student's own experience with the world; (3) Isolation of the essential aspects of each topic; and (4) Development of methods for helping the student grasp and use the data and concepts needed to understand the selected topic.

The materials which follow illustrate the four points. They are taken from the 1965 version of "The Study of Early Man" teaching materials developed by the Project. The total unit, which is about eight weeks long, is designed for ninth or tenth grade students. It includes readings and activities regarding race that occupy several days within the larger sequence.

It can be argued that adults should know something about race formation and classification. The criteria by which most adults identify the peoples of the world and classify them into national or racial groups are unclear and implicit where it is most important that they be clear and explicit. Development of this topic begins with an effort to have the students make explicit what they already know or believe about race. This is done in order to establish a baseline of present knowledge (or lack of it) from which they can work toward new understandings. The teacher is given specially prepared materials to supplement his own information and to help him guide students through the related lessons. We present the following excerpts from the experimental teacher's guide as an example of the level and depth at which an anthropological topic may be approached in a high school social studies class.

Sample Pages from the "Study of Early Man" Unit[2]

[The example begins with a brief exposition on race to provide a frame of reference to the teacher.]

Race is not an easy term to define, particularly in the case of our own species. Biologists use it more or less interchangeably with subspecies when they are talking about other animals or plants. There may be some plausibility in referring to Hottentots, Eskimos, Pygmies, Ainu, or a few other more or less reproductively isolated human populations as races in the biological sense of the term. They may indeed have considerable with-group uniformity with respect to the physical characteristics by which we may attempt to distinguish them.

But the great numbers of men and their mobility render the present concept of the human group as divisible into races as useless except for the specialist interested in studying human adaptations and evolutionary prehistory. The specialist knows that wherever large human populations occur there has been so much genetic mixture that variation is too great for racial descriptions, to have any real meaning, except in a purely statistical sense. What are observed are the tag ends of environmental adaptations, many of which may be shared by quite unrelated peoples who simply have existed in similar environments for very long periods of time.

In the last few thousands of years men have so learned to control their environments that at present almost anyone can live almost anywhere with little or no naturally selective disadvantage. The result is that the greater proportion of the world's peoples have so mingled their genes that populations can be differentiated only by gene frequencies that compare proportions of populations exhibiting a given trait. . . The concept of race, under such circumstances, cannot intelligently be applied to individuals. . . . One need remember . . . that not only is it practically impossible to describe a "typical" member of a race but that there are untold numbers of people who defy such categorization.

Furthermore, one can easily become too arbitrary about his bases for racial classification of individuals. It is easy to say that a man with "slanty eyes" is a "Mongoloid." But if three of his four grandparents were, in fact, "Caucasoid," and "slanty eyes" happened to be one of the few traits inherited from the fourth, such a categorization is scientifically ridiculous and philosophically without rationale . . . Defining a race socially is, of course, a different and much simpler matter. The membership of any "race" is defined by those people who claim membership in it.

Human races are hardly valid as biological units, being so arbitrarily based, but the term is probably with us to stay, despite the protestations of scientists and humanitarians, so it behooves us to develop sufficient understanding of its "meaning" (and the problems of its definition) to talk about it intelligently. This is an area of knowledge/folklore where, for the moment at least, a lack of assurance may be a good thing; so one of the main purposes of the following suggestions is to make students a little more conscious of the difficulties involved in defining the term.

Although the following suggestions are given by "days", there is more than can be done in the time allowed. What to condense or leave out must be a matter of judgment in context—what do you want to emphasize that ties in with later sections of the unit

or ties up earlier ones? As a last resort some exercises can be described rather than transformed. Discussion of some readings can be handled more speedily by means of worksheets, and you will no doubt see a number of instances where points can be made with less ado.

Before the first session, give the students the following list of questions. Answers may be written and handed in the next day (Day 1):

How many races are there?
How can you tell them apart?
What is a race?
Of what race are you? How do you know?

Day 1. [Assignments are collected and the class listens to a tape in which other youngsters attempt to answer the first three questions above and to identify by race the photographs of four people. The class looks at the photos while listening. The class attempts to identify the people in the photos after hearing the variety of identifications on the tape, and are asked what criteria they are using. They then are asked to differentiate between physical and cultural criteria.]

Work with the class to construct a chart of the "major races" on the blackboard. Elicit agreement as to ". . . what we shall consider for the time being to be the major races," and list them down one side. Across the top list the physical traits which will be referred to for "distinguishing characteristics," calling upon the class for the terms, but making sure some continuous variables are included, such as skin color, eyes, lips, nose, etc. Draw lines to make boxes in which will be placed the appropriate objectives. When the chart is finished, it should bear some resemblance to this:

	Skin	*Lips*	*Hair form*	*Nose*	*"X"*	*"Y"*
"White"	white			straight		
"Oriental"	yellow	thin	straight			
"Negroid"	brown	thick	kinky	flat		
.....	etc.	etc.	etc.			

In helping to construct the chart be relatively uncritical of students' choices, but demand that the adjectives be reasonably specific. Sooner or later, the students should themselves remark, "But some 'whites' have kinky hair," or make similar comments. At this point you should begin to ask for other exceptions, e.g., "Do all Negroes have thick lips?" and so on. After a while it will be clear that the chart needs revision. Some of the adjectives will need to be changed from specific to more inclusive. . . . Don't be dismayed if the whole activity begins to bog down in disagreement—this is what should happen. If the class is too agreeable, press them with questions using combinations of characteristics—"Do all 'whites' have white skin, thin lips, wavy hair, straight noses . . . ?" "What about the 'new race' of Hawaiians?" (This is a cross among Japanese, Chinese, occidentals, and natives.) "How long have races been mixing?" "American Negro different?" But it is not yet time for conclusions.

Having students prepared with pencils and paper, begin to show the set of slides of peoples of the world.[3] Refer to the slides only by number, asking that the students name from the chart the race of each person shown. (If there are no more than three races on the chart, let students locate the people geographically, rather than "race" them.) They should write their conclusions beside the corresponding slide number. Show the 23 full-face views only. When the slides have been shown, discuss what the students have written to see the extent of disagreement. Show the pictures (slides) again, this time the 23 profile views. See how many instances of mind-changing have occurred and how much disagreement there is now.

Now tell the class where each of the slide people came from, emphasizing that the examples were chosen at random, not for the purpose of fooling students. Exhibit the "tape" photos again and tell where these people live.

Discussion: Egypt is part of the UAR. Are Egyptians "Whites," "Negroes," or what? If "Negroes" (or whatever), do they fit all the adjectives in the chart? Apply similar questions to other people shown, reviewing slides as necessary.

For homework, read "Genetic and Environmental Influences on Body Measurements," from *The Human Species*, by F. S. Hulse.

Day 2. Discuss the homework reading from the standpoint of the influence of environment and genetics on some of the factors listed on the chart. Nose shape is, for example, illustrated and discussed in the reading, as are body form, stature and weight. Get the class to try to elaborate on the environmental reasons for these "racial" differences, and to speculate on some of the others.

Referring again to the homemade race chart, you should begin to bring out the point that many of the characteristics listed, such as skin color, represent continuous variables—that is why it is so difficult to draw a line between two races, if a single characteristic of this sort is used. A light "Negro" may be considerably lighter than a dark "white."

Let the class think of themselves as a population, and measure the frequency and range of some continuously variable characteristic. Height is probably easiest to measure though skin color may be more interesting and fun to chart, provided there are not individual students whose extreme position in the range might embarrass them too much. The latter can be measured by means of a good photographic light meter held no more than three inches from the inside (lightest part) of the forearm, about three inches below the point of the ulna (inside point of the elbow). Be careful that the light source is always the same distance from the spot measured and that its angle and that of the light meter are constant with respect to each skin surface measured. Using an arbitrarily chosen meter range, chart the distribution of skin shades in the class. (See below for the "point.")

If a good meter cannot be obtained, or if for any reason the measurement of skin shade is impracticable, measure stature instead. This is best done with the student standing against a smooth, vertical surface to which a yardstick has been attached vertically, its

lower end forty inches from the floor. If possible, have the students remove shoes and stand with back to wall, straining erect but on flat feet with shoulders back and chin tucked in. Using a cigar box or small pasteboard box hold it flush against wall and ruler, and bring it down to top of student's head for a reading. This should be done firmly so as to eliminate the effect of high hairdos. Then add forty inches to the reading on the yardstick and write each height on a 3 x 5 card. Boys' cards should be a different color from girls'.

In a vertical column on the bulletin board list intervals of two inches (or three, if you have less than twenty students) from the lowest to the highest heights recorded. Attach the cards in horizontal rows by the interval in which each card falls. Rows near center of range will be longest and, if class is large enough, there will be a fairly even distribution of cards above and below this mode. (If the boys are of an age to be well into their adolescent growth spurt, the distribution may be bimodal, with a different distribution for girls. If not, or if there are very tall girls or very short boys, it may be best not to use separately colored cards to avoid embarrassment for them). There will be relatively few cards near the extremes of the height range.

Conclusions to be reached:

1. In any population there is a range of variation with respect to any variable characteristic.
2. Most individuals are more or less "average," but a description of the "average" does not truly describe the whole population.

Discuss height and hair color as a combination, or if you charted skin shade, combine this with height. Do these variables vary together?

Conclusion: Persons who are "average" in one respect may be quite extreme in another. Refer back to the race chart and discuss it critically in the light of the above conclusions.

For homework, read "Biological Adaptations to Culture," from *The Human Species*, by F. S. Hulse.

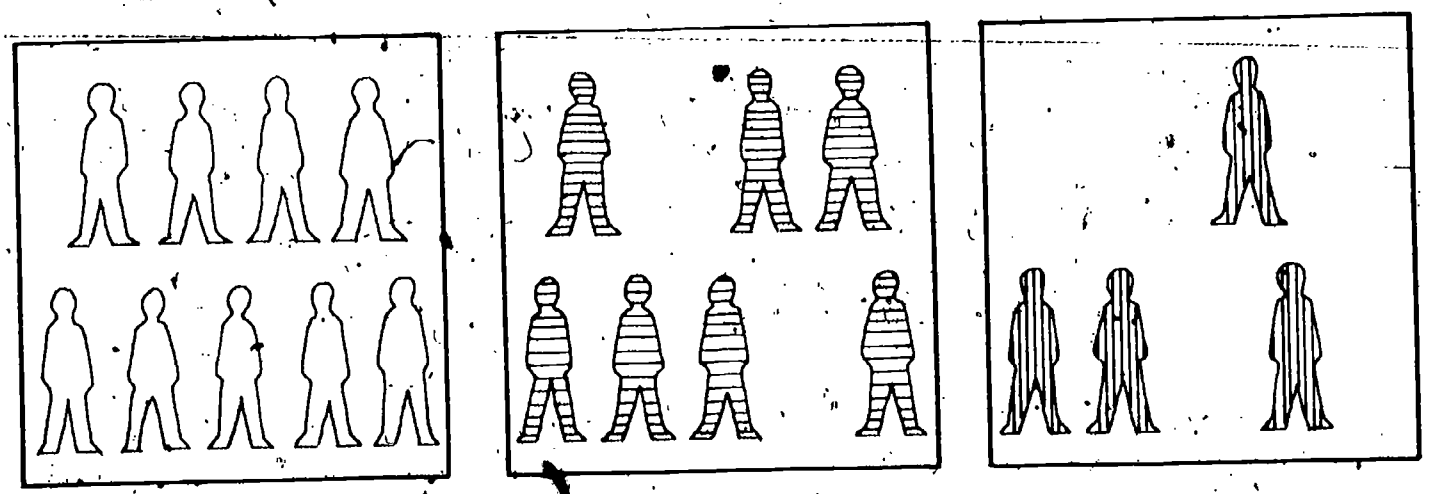
Day 3. Using the Population OHT #11 [Overhead Transparency #11 consists of a basic chart and two overlays. In the original, the basic chart shows four rows of six figures each. Each overlay represents a particular characteristic, and when superimposed on the basic chart, the proportion of that characteristic in the total population appears.] pound home the point made that traits in a population vary independently of one another. . . If horizontal lining (Overlay 1) is "typical" of this population, that does not signify that all members in good standing have horizontal lines. If vertical lines (Overlay 2) are also "typical" this means neither that those with horizontal lines also have vertical lines nor that those without horizontal lines lack vertical lines.

Conclusion: While it may be possible to describe particular races for some purposes, the descriptions must be understood to apply only to populations, not to their members as individuals.

While the Amerind "race" is indeed "typified" by presence of Diego antigen, it is nevertheless a fact that many Amerinds lack this trait. Similarly, while the "Alpine race" is characterizable as blond, it contains a great many brunettes . . . and so on.

Use OHT #2 [Overhead Transparency #2 is a map of Europe zoned and colorcoded to show percentage of light eyes in the population: (100-90), (90-80), (80-70), etc.] to make the point that races, if they must be defined, are best defined on the basis of *trait frequency*. This eliminates the problem of racial categorization of individuals. We can characterize the Northern European "race" as having 50 percent or more light eyes, and the African "race" as having 49 percent or less of light eyes. With respect to this one trait any individual could be either a Northern European or an African, for there would be no way of telling which; but any given population is immediately dis-

FIGURE 1. OVERHEAD TRANSPARENCY #11



Basic Chart Overlay 1 Overlay 2

tinguishable as not Northern European or not African. (One might add parenthetically that it is usually a good deal easier to say who is not of a given race than it is to say who is.)

Discussion: What are some of the causes of these "racial" differences? It should be brought out here that, as seen in the homework reading, cultural factors are very much involved.

Distribute the matrimonial ads of the *Bombay Times* (see below) and have the students discover some of these cultural influences. It might be fun to discuss mating preference in our own society.

MATRIMONIAL

MATRIMONIAL CORRESPONDANCE invited for Matriculate Punjabi Khatri girl, 21, beautiful, slim, well-versed in household. Decent marriage. Apply Box 23032 The Times of India, Bombay 1. A38144(X)

MATRIMONIAL CORRESPONDENCE is invited from well settled boys for a fair Kerala Brahmin girl of 21, studied up to Matric. Please reply to Box 23948 The Times of India, Bombay 1. A39072(X)

PARENTS OF EDUCATED AND DOmestically trained Parsee girl, aged 22, invite matrimonial correspondence from well placed Parsee bachelors of respectable family. Write in details Box 23376, The Times of India, Bombay 1. A38466(X)

PARENTS OF CUTCHI SWETAMBER Murtipujak Jain civil engineer, aged 26, invite matrimonial proposals from parents of healthy educated Gujarati girl, Jan Bania preferred. Early marriage. Please reply with particulars. Box 2292 The Times of India, Bombay 1. A38036(X)

RESPECTABLE, WELL PLACED Christian gentlemen, 40, employed in reputed foreign firm, seeks suitable match. Apply Box 23944, The Times of India, Bombay 1.

SUITABLE MATCH FOR GUJARATI Kapol Bania homeloving girl, age 22, passed SSC. Well settled Gujarati preferred. Write full particulars Box 23630, The Times of India, Bombay 1. A38715(X)

SUITABLE MATCH WANTED: (a) Kerala Bramin girl 26, very fair, employed, only daughter Pooram, Atreya Gotram (b) Boy 28, Cost Accountant earning 300 monthly in reputed firm Bharadwaja Gotram Pooratem. Reply Box 23860, The Times of India, Bombay 1. A38979(X)

WANTED IMPRESSIVE, TALL, FAIR, preferably Medical Graduate Maharashtrian Brahmin bride from respectable family, prepared to go abroad for healthy, handsome, Maharashtrian, 28, foreign qualified, Government of India Service. Apply with horoscope, to Box 23856, The Times of India, Bombay 1. A38946(X)

Is natural selection also involved? Allow further speculation on this, then assign (for homework) reading of "Historical Distribution of Racial Varieties." Distribute also the following worksheet to be filled out in conjunction with the reading:

Characterize, if you can, each of the following human groups:

1. American Indians
2. Arctic peoples
3. Eastern Asians
4. Pacific Islanders
5. East Indians
6. Africans
7. Caucasoids
8. Central Asians

For each of ten subgroups (subheadings in article) of your choice, decide on one characteristic that may be adaptive, and explain why you think so.

Day 4. Discussion: How may natural selection have been influential in the formation of races? Review the characteristics of some of the varieties Hulse describes and their possible adaptive value:

Eskimos—built for least heat loss

Melanesian and Africans—built for most heat loss (dark skin for protection from U-V radiation of equatorial sun)

Why are Pygmies small?

Why are Plains Indians, and some other savanna hunters, tall?

Why do temperate zone dwellers tan readily but have relatively light skins?

Why do very fair-skinned northerners tan not quite so readily?

And so on.

Discussion: Race and Intelligence

Why are humans more "intelligent" than other animals?

What is intelligence?

Why should any group of humans be more or less "intelligent" than another? (This is a very good argument for intellectual "equality.")

It should be pointed out that every human trait is ultimately a product of natural selection. This certainly applies to "intelligence." It is probably true that, generally speaking, there has occurred selection for particular kinds of specific intellectual abilities (perhaps in our society for mathematical reasoning), but there are as yet no valid criteria or methods for evaluating the innate learning capacity of any group of people in contrast to another. To say that all groups are equal in this respect because evidence to the contrary is lacking is, however, as logically fallacious as to assume the opposite. But a couple of points are worth making:

1. Since all human groups are capable of communicating clearly with one another, and with no other species of animal, they can't differ so very much in intellectual capacity.
2. For a Bushman to learn to stalk a kudu is easily as difficult as for a French cab driver to learn his way about Paris.
3. "Intelligence," if and when it is definable, is a continuous variable and cannot, therefore, ever be applied as a racial characteristic to individuals.

Assignment: Read "Technological Advances and Population Change." Review and revise the first homework paper—questions on race. What is the difference between an Englishman and a Caucasoid? (Can a Negro be an Englishman?)

Discussion and Conclusion

The aim of these lessons is to convey more than just information about race formation and classi-

fication. The hope is, first of all, to involve the student by starting him with his own experience of the topic and then to help him place that experience in a context that provides new perspectives which may also be applicable to other areas of knowledge. In the case of the materials presented above, the problem is to make the student aware of the confusion of criteria in the conventional classification of peoples into "racial" groups. He may realize—by becoming aware of the criteria he himself customarily uses, and by trying to apply them systematically—that there can be no definitive grouping. He finds that he cannot assign the accepted "facts" into categories of similar and dissimilar objects.

In constructing the "race chart" and tabulating the variations among his classmates in height, skin color, nose shape and so on, he may come to see that the criteria chosen to describe a race are not mutually supportive; that they are often, in fact, continuous variables. This understanding will, hopefully, lead him to the realization that it is population and not individuals that determines the pattern of transmitted genetic traits. This is a basic and far from watered-down lesson in anthropology.

Because these ways of thinking have become clearer to him, the student has something more than mere data (which may become obsolete) with which to work. He may be able to apply such thought processes to other kinds of data and even, perhaps, to improve upon them.

It is difficult to evaluate the effect of such lessons because the results desired most are behavioral objectives which elude most testing procedures. Interviews with students and teachers do not suggest that sweeping reforms have been initiated. They do demonstrate that students and teachers have become aware of certain qualities of teaching and learning. Teachers realize, some for the first time, that students can think. One teacher who had literally considered his students to be sponges, reported this realization with enthusiasm. Another teacher commented, "For the first time the students themselves were aware that they knew how to discuss something and realized that they were not just exchanging opinions." Another effect reported by one teacher was that ACSP materials had led (forced?) him to do more reading than he usually did in preparing for class.

Some students respond that they are relieved to be "allowed" to think. One said, "It made me have a good feeling—like I had done something worth doing and not just read it out of a book."

There are no panaceas in a situation as vast and differentiated as secondary education. But there is evidence that ACSP materials can help students and teachers who know what they need and can move others towards goals they otherwise might not have perceived.

NOTES AND REFERENCES

1. Robert G. Hanvey, "Anthropology in the Schools," *Educational Leadership*, Vol. 22, No. 5, February 1965, p. 313.
2. Teaching Plan, "Study of Early Man," ACSP 1965 Experimental Version, pp. 68-74.
3. The complete set includes 23 full-face and 23 profile views of young adults from all continents, from all over the world. The pictures cannot be reproduced here but are easy to imagine—standard "peoples of the world" but wearing modern "Western" clothes.